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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,290	07/23/2003	Jeffrey Alan Miks	W0301007	7892
23504	7590	01/20/2006	EXAMINER CARPIO, IVAN HERNAN	
WEISS & MOY PC 4204 NORTH BROWN AVENUE SCOTTSDALE, AZ 85251			ART UNIT 2841	PAPER NUMBER

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,290

Applicant(s)

MIKS ET AL.

Examiner

Ivan H. Carpio

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/26/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,11,12 and 19-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,11,12 and 19-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/26/2005 have been fully considered but they are not persuasive. With respect to the applicant's argument that Ainsbury does not disclose a channeling as claimed by the applicant, the examiner respectfully disagrees. Examiner acknowledges a typographical error in the rejection of claim 11 in that element 48 is a side edge member, however Fig. 2B clearly shows a channeling formed near element 48 in between the upper and lower casing. With respect to the applicant's argument that Ainsbury fails to disclose an edge connector contact running along a length of the channeling, the examiner respectfully disagrees. Looking at Fig. 2B it is clearly evident that connector 42 runs along a length of the channeling formed by the upper and lower casing. With respect to the applicant's argument that Ainsbury does not disclose a channel between elements 47 and that Ainsbury does not disclose an edge connector contact running along the length of the channeling, the Examiner respectfully disagrees. Looking Fig. 7 it is clearly evident that elements 47 create a channeling when pressed together, furthermore it is clear that edge connector 49 runs along the channeling formed by elements 47.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23 and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 23 states that the channeling of the front half module is formed in the substrate which contains at least one die coupled thereto, nowhere in the specification does it disclose that the channeling is in the substrate, in fact the specification only discloses that the channeling is formed on the rear section of the front half (page 6, line 19). Claim 29 states that the tab member of the front half module is formed in the substrate which contains at least one die coupled thereto, nowhere in the specification does it disclose that the tab member is in the substrate, in fact the specification only discloses that the tab member is extends from the rear section of the front half module (page 11, line 10). These limitations are not supported in the specification and have not had art applied to them.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ainsbury (US Patent 5513074).

With respect to claim 11 and 12, Ainsbury teaches a front half module (Fig. 1a, element 1), the front half module being a functional circuit module having electrical contacts on a front portion thereof; a rear half module (Fig. 1a, element 40) removably coupled to the front half module; a channeling (Fig. 2B, element 48 and Fig. 2A, in between elements 47) formed on the rear section of the front half module and the front section of the rear half module respectively, the channeling running along a length of the front and back half; a contact (Fig. 2B, element 42 and Fig. 2A element 49) running along a length of the channeling for allowing electrical coupling between the front half module and the rear half module, a tab member (Fig. 7, the rectangular tab at the front portion of element 41 and Fig. 4B, the rectangular tab at the back portion of element 42) formed on a front portion of the rear half module and the back portion of the front half module respectively and a mating connector (Fig. 7, element 49 and Fig. 4B, element 42) formed on the tab member, the mating connector engaging the contact electrically couple the front half module to the rear half module. Ainsbury does not specifically teach that the mating connector is a pin connector. It is well known in the art to use pin connectors to electrically couple two elements further more it would have been obvious to one of ordinary skill in the art at the time of the invention to use a mating pin connector to electrically couple the two halves because these types of connectors are so well known that manufacturing methods would be easily obtained.

With respect to claim 24 and with all the limitations of claim 11, Ainsbury teaches a die (Fig. 4b, element 8) and a contact (Fig. 4b, element 42) coupled by conductive patterns formed in the substrate (column 5, lines 15-24).

With respect to claims 25, 26 and 30,31 and with all the limitations of claims 11 and 12 respectively, Ainsbury teaches all of the limitations except that the contact is an edge connector and that the mating connector is a spring connector pin. It is well known in the art to use edge connectors and spring connectors pins to electrically couple two elements and used often because of the ease of connection. It would have been obvious to one of ordinary skill in the art at the time of the invention to use an edge connector and a mating pin connector to electrically couple the two halves because these types of connectors are so well known that manufacturing methods would be easily obtained.

With respect to claims 27 and 32 and with all the limitations of claims 11 and 12 respectively, Ainsbury teaches coupling a rear half module which is a function I/O component (column 2, lines 58-63), the rear half module being coupled to the front half module to increase functionality of the multi use circuit module by allowing different I/O components to be coupled to the front half module.

With respect to claims 28 and 33 and with all the limitations of claims 11 and 12 respectively, Ainsbury teaches that the front half module is a memory module (column 4, lines 20-31).

Allowable Subject Matter

Claims 1,2 and 19-22 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: Gochnour (US Patent 6865086) teaches a locking projection (Fig. 3, element 148) at the edge defining a channel but does not teach a locking ball on a surface within

the channeling. The prior art does not teach nor make obvious a locking ball that is formed on a surface within a channeling of a front half module that interacts with an indentation on a tab member formed on a rear half module for locking purposes as in the claimed invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ivan H. Carpio whose telephone number is 571-272-8396. The examiner can normally be reached on M-R 6:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2841

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IC


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